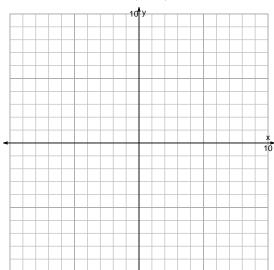
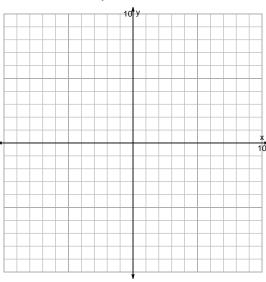
s18quiz: EXP LOG (QUIZ v250)

1. Graph  $y = \log_2(x+4) + 6$  and  $y = 2^{x-4} + 5$  on the grids below. Also, draw any asymptotes with dotted lines.

$$y = log_2(x+4) + 6$$



$$y = 2^{x-4} + 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$11 = \left(\frac{4}{3}\right) \cdot 10^{-5t/7}$$

3. An exponential function  $f(x) = 94 \cdot e^{-1.02x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(2.3).
- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(800)$ .